

REMARKS

1. Claims 1-46 and 50-54 were pending. Claims 1, 9, 13, 15, 18-23, 26, 30-34, 37, 39, 41-42, 44-45, 50, and 53 have been amended. Claims 1-46 and 50-54 are now pending. Reexamination and reconsideration of the application, as amended, are requested.
2. The Office Action allowed Claims 37-38, 40 and 43, and indicated Claims 10, 16, 18-30, 39, 41-42, 44-46, and 50-054 would be allowable if rewritten.
3. Rejections under 35 U.S.C. § 112 ¶ 2  
On pages 5 and 6 of the Office Action, Claims 9-10, 15-16, 18-36, 39, 41-42, 44-46, and 50-54 were rejected under 35 U.S.C. § 112 ¶ 2. These claims have been amended to more particularly point out and distinctly claim that which the Applicants regard as their invention.
4. Rejection under 35 U.S.C. § 102(b) and § 103(a)  
Claims 1-4 and 11-12 were rejected in the Office Action under 35 U.S.C. § 102(b) as being anticipated Douglas (US Patent No. 4,807,016). Claims 5-8, 13-14, and 17 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Douglas (US Patent No. 4,807,016). Claims 1-9, 11-15, and 17 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Yang et al. (US Patent No. 5,677,227). Claims 1-9 and 11 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Bosch et al. (US Patent No. 5,611,888). Claims 31-36 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki et al. (JP61-133,666). The Applicants respectfully traverse the rejections and request consideration of the following.

5. Bosch et al., Douglas, and Yang et al. each disclose an etchant that etches doped silicon dioxide selective to undoped silicon dioxide. Douglas and Yamazaki et al. discloses various etchants, but do not disclose the etchant to be a fluorine and carbon compound. A copy of an English translation of Yamazaki et al. is included herewith. Both Bosch et al. and Yang et al. disclose the etchant to be Freon 23 (CHF<sub>3</sub>). Other than Freon 23, neither Bosch et al. nor Yang et al. disclose any other etchant that is a fluorine and carbon compound.

6. The limitation of Claims 1 and 31 that the material removal rate "is at least 10 times higher for doped silicon dioxide than for undoped silicon dioxide or for said layer of semiconductor material" has been removed from Claims 1 and 31 and has replaced the limitations of Claim 9 and 34, respectively. The limitation in Claim 13 of "whereby a contact is exposed on said layer of monocrystalline silicon" has been removed to replace the limitations in Claim 15.

7. Claims 1, 13, 30, 31, 39, 45, and 53 have been amended to reflect the limitation that the etchant is selected from the group consisting of C<sub>2</sub>F<sub>6</sub>, CF<sub>4</sub>, C<sub>3</sub>F<sub>8</sub>, C<sub>4</sub>F<sub>10</sub>, CH<sub>2</sub>F<sub>2</sub>, C<sub>2</sub>HF<sub>5</sub>, and CH<sub>3</sub>F. The group of etchants recited in these claims, as amended, is a fluorine and carbon compound and does not include Freon 23 as taught in Bosch et al. and Yang et al. Neither Douglas nor Yang et al. teach an fluorine and carbon compound etchant. As such, the Applicant respectfully submits that the claims rejected by applying Bosch et al., Douglas, Yang et al., and/or Yamazaki et al. are allowable as amended.

8. In sum, the Applicant respectfully submits that, as to the claims now pending, a *prima facie* case of obvious has not been made out, or in the alternative, the pending claims avoid the rejection. As such, the Applicant respectfully maintains that the present application is in

condition for allowance. Reconsideration of the rejections is requested. Allowance of Claims 1-46 and 50-54 at an early date is solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application which could be clarified by a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 25 day of May, 2000.

Respectfully submitted,



BRADLEY K. DESANDRO  
Attorney for Applicant  
Registration No. 34,521

WORKMAN, NYDEGGER & SEELEY  
1000 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, Utah 84111  
Telephone: (801) 533-9800  
Facsimile: (801) 328-1707

G:\DATA\WPDOCS3\PRH\BKD\MICRONAMEND\114-B.AMD